## WHY PEOPLE BELIEVE GOD CAUSED THE BIG BANG

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The Bible is filled with the idea that God created the universe from nothing. The Gospel of John, for example, begins, "In the beginning was the Word, and the Word was with God, and the Word was God." "The Word" can be interpreted to mean the idea of the universe in God's mind. The discovery in the 1960s of the cosmic background radiation produced when electrons combined with protons to form hydrogen atoms is evidence that the universe began to exist 13.7 billion years ago as a tiny particle. This theory is called *the Big Bang* and is a reason to believe God inspired the human authors of the Bible.

The Catholic Church teaches that we know God exists from reason, and many people mistakenly think the Big Bang, the "fine-tuning" of the physical constants that enabled life to begin on Earth, the origin of life, and biological evolution is evidence that God exists. These are called *god-of-gaps* arguments. These arguments do not violate the scientific method because the question of whether or not God exists is a metaphysical question, not a scientific question.

These arguments can be succinctly refuted with the question, "What caused God?" This essay attempts to explain more explicitly the reason these arguments are fallacious. I also argue that people who think the scientific arguments for God's existence are reasonable are suffering from cognitive dissonance.

Cognitive dissonance occurs when a person believes something that is in conflict with some aspect of reality. This causes emotional and mental stress that inhibits a person from thinking with their usual levels of intelligence and rationality and behaving with their usual integrity. To suggest that someone is suffering from cognitive dissonance requires identifying the belief and the aspect of reality the belief conflicts with.

Atheists and agnostics, for example, are suffering from cognitive dissonance because they believe life ends in the grave. The conflicting aspect of reality is that all religions, East and West, maintain that we pay for our sins after we die. Atheists make themselves feel better by saying, "God does not exist." Agnostics say, "I don't know whether or not God exists." This is irrational and dishonest because there are arguments, not proofs, for God's existence. It is perfectly reasonable to say that the arguments are not persuasive. Atheists and agnostics don't say this because they don't know the arguments or don't want to think about the arguments for God's existence. They prefer to take the low road of denial than the high road of pointing out the weaknesses in the arguments.

The human mind is structured like the scientific method. At the lowest level are observations, which requires paying attention. At the level of inquiry, we ask questions about what we observe. We want to know the cause of things, the relationship between things, and the unity between things. Extremely intelligent humans invent theories, hypotheses, explanations, or insights to answer these questions. At the level of reflective

judgment, we marshal the evidence and decide whether a theory is true or just probable. This level requires being rational. The fourth level is deciding what to do with our bodies, which requires being responsible.

The Magis Center promotes the god-of-gaps arguments and has on its advisory board three cardinals and three bishops of the Catholic Church. Another of its advisors is Stephen Barr who was awarded a medal by Pope Benedict XVI for his services to the Catholic Church and is a member of the Academy of Catholic Theology. My interpretation of the following quote is that Barr considers Cartesian dualism a reasonable theory:

"However, having started with the empirically quite unsupported postulate of atheism, the materialists is practically forced to call a variety of empirical facts 'illusions'—not facts that are in front of his eyes, but are behind his eyes, so to speak, facts about his own mind.

None of this is to deny that there are some very hard questions that arise from the idea that the human mind is not entirely reducible to matter. There certainly are. For instance, if there is something immaterial about the mind, how does it affect the brain and body?" <sup>1</sup>

Barr is confusing and conflating two different methods of inquiry: science and metaphysics. Science arises from questions about "facts that are in front of his eyes," as Barr cogently puts it. Metaphysics arises from questions we ask because we can make ourselves the subject of our own knowledge. An example of a metaphysical question is: What is the conscious knowledge of humans as opposed to the sense knowledge of animals?

The following quote from a textbook that is used by 65% of biology majors in the United States is even more sympathetic to Cartesian dualism than Barr:

"And certain properties of the human brain distinguish our species from all other animals. The human brain is, after all, the only known collection of matter that tries to understand itself. To most biologists, the brain and the mind are one and the same; understand how the brain is organized and how it works, and we'll understand such mindful functions as abstract thought and feelings. Some philosophers are less comfortable with this mechanistic view of mind, finding Descartes' concept of a mind-body duality more attractive."<sup>2</sup>

By contrasting "most biologists" with "some philosophers," Campbell is confusing philosophy with science and metaphysics. Philosophy is a method of inquiry above another

<sup>&</sup>lt;sup>1</sup> Stephen Barr, *Modern Physics and Ancient Faith* (Notre Dame, IN: University of Notre Dame, 2003), location 4612

<sup>&</sup>lt;sup>2</sup> Campbell, Neil, *Biology* (Menlo Park, CA: Benjamin/Cummings Publishing Company, 4<sup>th</sup> edition), page 776

method of inquiry. The scientific method, for example, arises from the philosophical question: What is the best way to do science? The scientific method is the result of philosophical analysis.

Furthermore, Campbell's reference to Cartesian dualism indicates he doesn't know what Cartesian dualism is. Barr correctly describes Cartesian dualism with the phrase, "something immaterial about the mind."

Cartesian dualism is the theory that there is a spiritual substance inside our brains that controls our bodies like a stagecoach driver controls a team of horses. There is no evidence for this theory and it conflicts with the metaphysical insight that unity is a property of being. René Descartes' real contribution to metaphysics is, "I think, therefore I am." This expresses the metaphysical experience all humans have of our own existence. Furthermore, we exist as a single unified being. Metaphysically speaking, we are not a collection of molecules because a collection of molecules is many beings, not one being.

According to the metaphysics of Thomas Aquinas, a being that is in a class or category of beings is a composition of *form* and *matter*. *Form* is the metaphysical principle that makes the being a member of the class, and *matter* is the principle that makes each being in the class different from one another. Angels are unique, so an angel is not a composition of *form* and *matter*. Since human beings have different properties than animals, humans form a class of being and are compositions of *form* and *matter*. In the case of humans, Aquinas uses the term *soul* for *form* and *body* for *matter*.

Many people, however, use the terms *body* and *soul* differently. They think our *body* is something that we control because we have free will. They think our *soul* is spiritual by definition. The statement, "Human beings have souls," is equivalent in the minds of many people to Cartesian dualism.

According to modern Thomism, the human soul is spiritual because we can't define or explicate what free will and "abstract thought" is. We can comprehend free will because we have it. We understand that we can move our hand around anyway we wish, but if we lose our hand in an accident we still continue to exist. We ask: What is the relationship between my hand and myself? This question is a mystery.

In science, there are no mysteries. There are only unanswered questions. There is no urgency to answer any scientific question. We have all the time in the world to get some insight into the cause of the Big Bang and to understand quantum mechanics. This is not the case with metaphysical questions because all religions are summoning us to believe we may pay for our sins when we die. We do not have all the time in the world to figure out what free will is. A rational and responsible decision about this question is that human beings are embodied spirits or spirited bodies. This decision is based on the evidence and leads to the arguments for God's existence and the reasons to believe the Bible is the word of God. If "mind and brain are one," there is no argument for God's existence.

Also, there is a excellent track record of success in science. There is no comparable track record of success in metaphysics, though it is wonderful to know about *form* and *matter*. Another example of metaphysical wisdom is that *knowledge* is the openness of being to the self-manifestation of being. It is also great to know that a being that changes in time is a composition of *substance* and *accident*, and that a finite being is a composition of

essence and existence. However, this is a different kind of knowledge than knowing why all hydrogen atoms are exactly the same size.

This means that the quotation from the biology textbook is extremely misleading. In Campbell's paragraph, there are two solutions to the mind-body problem: "mind-body duality" and "brain and mind are one and the same." There are in fact two other solutions. One is that humans are embodied spirits, as I just explained. The other is called *idealism*. Just as dualism is just a bright idea from René Descartes, idealism is a just bright idea from George Berkeley.

While Berkeley was sitting on a rock and contemplating his existence, he wondered why God created the rock since the rock did not know it existed. He reasoned that God created the rock so he would have something to sit on. But since God has infinite power, God could just as easily create the illusion that the rock exists. Idealism is the theory that the material world is an illusion.

From my experience blogging and reading, I agree with Campbell's statement that most biologists think the "brain and mind are one." The reason biologists think this is that they don't understand the metaphysical theory that humans are embodied spirits or pretend they don't understand. They don't understand the difference between this insight and "mind-body duality." In my opinion, most biologists fail at the level of knowledge, not at the level of reflective judgment. It shows good judgment to reject "mind-body duality," but bad judgment to think the "brain and mind are one."

However, this is not Barr's understanding of the mistake most biologists are making. Barr does not think, as I do, that most biologists have a blind spot about human beings. Barr thinks they have poor judgment because they think there is more evidence for "brain and mind are one" (quoting Campbell) than there is for "something immaterial about the mind" (quoting Barr).

This means that Barr and other the god-of-gaps apologists have two sources of cognitive dissonance. Thinking someone you disagree with has poor judgment is a source of cognitive dissonance because it may be you that has poor judgment. You may get temporary relief by denigrating the judgment of those that disagree with you, but the thought that you might be wrong is there unconsciously and is a possible source of mental and emotional stress.

The second source of stress is that believing in Cartesian dualism conflicts with the reality that there is no evidence for Cartesian dualism. God-of-gaps apologists feels a desperate need to find more evidence for Cartesian dualism since free will and the conscious knowledge of humans is not enough to persuade most biologists it is not true that "brain and mind are one." Driven by cognitive dissonance, they persuade themselves that the Big Bang is evidence of God's existence. In their minds, God is a spiritual substance analogous to the spiritual substance in Cartesian dualism.

The Big Bang raises the scientific question: What caused it? One theory is that the universe will eventually contract and produce another Big Bang. In other words, our Big Bang is just one of an infinite regression of Big Bangs. This is called the Big Bounce theory. Since there is very little evidence for this theory, it is judged to be improbable by rational people.

Thinking the Big Bang is evidence of God's existence is an exercise in circular reasoning because it does not contribute to our knowledge of anything and assumes to be true a proposition that may not be true. The fact that the Big Bounce theory and others like it are not supported by evidence is evidence that the universe is not intelligible. When animals have nothing to do they go to sleep. Only human beings ask questions. Just because a human being asks a question does not mean there has to be an answer.

The god-of-gaps apologists consider the Big Bang to be an *effect*, which is a concept in metaphysics. In metaphysics, the principle of *causality* is that for every *effect* there is a *cause*. The cause preceded the effect, not in the order of time, but in the order of causality. The principle of causality is not a self-evident truth. It is just an expression of the hope or assumption that the universe is intelligible. However, the god-of-gaps apologists think it is irrational to reject the principle of causality. They then call the Big Bounce theory a natural explanation for the Big Bang. Since there is little evidence for any natural explanation, there must exist a "supernatural" explanation or a cause. To complete the vicious circle, they call the "supernatural" explanation or the cause *God*. This reasoning conflicts with the very way the human mind is structured. There are only good and bad explanations. Good explanations are supported by the evidence and judged to be true by rational people. Bad explanations are just the opposite.

It might be objected that this analysis proves the Catholic Church is wrong to teach that we know God exists from reason. This is not true because the arguments for God's existence are not exercises in circular reasoning and contribute to our knowledge and understanding of the world we live in. The argument is called the *cosmological argument* because it is based on the prime mover argument of Aristotle and the first cause argument of Thomas Aquinas as explained by Ètienne Gilson in the 1920s with the metaphysics of Thomas Aquinas. This argument is not an exercise in circular reasoning because it explicitly states that it is based on the hope or assumption the universe is intelligible. You can refute the argument by citing the Big Bang, "fine-tuning" of the universe, origin of life, and biological evolution as evidence that the universe is not intelligible.

I'll start the argument by refuting Berkeley's idealism with the observation that other human beings exist and that we interact with each other in an entirely different way than we interact with a rock we are sitting on or a traffic cop. This means that humans are finite beings in addition to being embodied spirits. Just as a being that begins to exist at some point in time needs a cause, a finite being needs a cause. If all beings in the universe needed a cause, the universe would not be intelligible. Hence, there must exist at least one infinite being. If there is an infinite regression of finite beings in a causal chain, an infinite being must exist outside of the chain causing the entire chain to exist. In Western religions, we call the infinite being *God*. In one of the Eastern religions, the infinite being is called *Tao*, which means "the way."

It might be objected that this argument is a supernatural explanation for the existence of finite beings. However, this argument has no explanatory power. The argument raises the question of what motivated God to create finite beings. The only thing that could motivate God to do anything is self-love. God created finite beings because He loved Himself as giving. But God could just as well love Himself without giving. This means the existence of finite beings is also a mystery.

It might also be objected that this argument does not tell us anything about the world we live in. A finite being's *essence* limits its *existence*. An infinite being is a pure act of *existence*. This sheds light on the name that God gave Himself in Exodus 3.14: I am who am.

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